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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/650,885	08/28/2003	Detlef Haje	2001P00790WOUS	8729	
7590	10/28/2004	EXAMINER			
MCALLENAN, JAMES M					
ART UNIT		PAPER NUMBER			
		3745			

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/650,885	HAJE, DETLEF
	Examiner	Art Unit
	James M McAleenan	3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,4,6-12,14,16,18,20,22,24,26-28,30,32-35,37 and 39-41 is/are rejected.
- 7) Claim(s) 3,5,13,15,17,19,21,23,25,29,31,36 and 38 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 August 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/28/2003.

- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 9 and 28-34 are objected to because of the following informalities: The term “can” is an indefinite term and should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 11, line 3, the “expansion stage” has not been identified as either the first or second expansion stage? Applicant needs to insert the term - -first- - before the “expansion stage”.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, 6-12, 14, 16, 18, 20, 22, 24, 26-28, 30, 32-35, 37 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoizumi et al. (U.S. Patent Number 4,693,086) in view of Herr (U.S. Patent Number 4,077,432). The Hoizumi et al. device discloses a steam line isolation valve for closing a steam line particularly in a steam turbine system

between a first expansion stage and second expansion stage that is operated at lower pressure than the first expansion stage (see Figures 1a, 3a, 4a, 5a and Col. 3, lines 42-50 and Col. 6, lines 55-63 and Col. 8, lines 28-44). Regarding claim 11, the Hoizumi et al. device discloses one first expansion stage and one second expansion stage that is operated at lower pressure than the first expansion stage of which there is at least one (see Figures 1a, 3a, 4a, 5a and Col. 3, lines 42-50 and Col. 6, lines 55-63 and Col. 8, lines 28-44). The Hoizumi et al. device discloses one steam line for feeding the second expansion stage, wherein there is disposed in each of the steam lines, upstream of the supply lines to the second expansion stage, a steam isolation valve (see Figures 1a, 3a, 4a, 5a and Col. 3, lines 42-50 and Col. 6, lines 55-63 and Col. 8, lines 28-44). However, the Hoizumi et al. device does not disclose the elements and characteristics of the valve that cover the cross-section of the steam line.

However, Herr (U.S. Patent Number 4,077,432) discloses a valve having a plurality of elements that jointly cover the cross-section of the steam line (see Figure 2 and Col. 1, lines 10-22 of Herr). Regarding claim 2, Herr discloses the valve having a recess that does not extend over the entire thickness of the elements (see Figures 4-7 and Col. 3, lines 48-68 and Col. 4, lines 1-19 and lines 57-68 of Herr). Regarding claim 4, Herr discloses the elements are matched to the cross-section of the steam line. Regarding claim 6, Herr discloses the elements having the same width (see Figures 4-7 and Col. 3, lines 48-68 and Col. 4, lines 1-19 and lines 57-68 of Herr). Regarding claim 7, Herr discloses the elements have different dimensions for matching to the cross-section of the steam line (see Figures 4-7 and Col. 3, lines 48-68 and Col. 4, lines 1-19 and lines 57-68 of Herr). Regarding claim 8, Herr discloses the elements having the same moment of inertia about an axis of rotation. Regarding claim 9, Herr discloses the elements of the steam

line isolation valve can move independently of one another. Regarding claim 10, Herr discloses a plurality of element of the steam line isolation valve being connected to a common drive via a gear(see Figures 4-7 and Col. 3, lines 48-68 and Col. 4, lines 1-19 and lines 57-68 of Herr).

Regarding claim 12, Herr discloses the elements are matched to the cross-section of the steam line (see Figures 4-7 and Col. 3, lines 48-68 and Col. 4, lines 1-19 and lines 57-68 of Herr).

Regarding claim 14, Herr discloses the elements having the same width (see Figures 4-7 and Col. 3, lines 48-68 and Col. 4, lines 1-19 and lines 57-68 of Herr). Regarding claim 18, Herr

discloses the elements have different dimensions for matching to the cross-section of the steam line. Regarding claim 20, Herr discloses the elements have different dimensions for matching to the cross-section of the steam line. Regarding claim 22, Herr discloses the elements having the

same moment of inertia about an axis of rotation (see Figures 4-7 and Col. 3, lines 48-68 and Col. 4, lines 1-19 and lines 57-68 of Herr). Regarding claim 24, Herr discloses the elements having the same moment of inertia about an axis of rotation (see Figures 4-7 and Col. 3, lines 48-68 and Col. 4, lines 1-19 and lines 57-68 of Herr). Regarding claim 26, Herr discloses the

elements having the same moment of inertia about an axis of rotation. Regarding claim 27, Herr discloses the elements having the same moment of inertia about an axis of rotation. Regarding claim 28, Herr discloses the elements of the valve that can move independently of one another.

Regarding claim 30, Herr discloses the elements of the valve that can move independently of one another. Regarding claim 32, Herr discloses the elements of the valve that can move

independently of one another. Regarding claim 33, Herr discloses the elements of the valve that can move independently of one another. Regarding claim 34, Herr discloses the elements of the valve that can move independently of one another. Regarding claim 35, Herr discloses a

plurality of element of the steam line isolation valve being connected to a common drive via a gear. Regarding claim 37, Herr discloses a plurality of element of the steam line isolation valve being connected to a common drive via a gear. Regarding claim 39, Herr discloses a plurality of element of the steam line isolation valve being connected to a common drive via a gear. Regarding claim 40, Herr discloses a plurality of element of the steam line isolation valve being connected to a common drive via a gear. Regarding claim 41, Herr discloses a plurality of element of the steam line isolation valve being connected to a common drive via a gear. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to modify the Hoizumi et al. device by incorporating the valve as taught by Herr, for the purpose of having flow control as claimed by Applicant's claimed invention.

Allowable Subject Matter

Claims 3, 13,15,19,23,29,36 and 5, 17,21,25,31,38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Since claim 3 has the novel features and claims 13,15,19,23,29,36 depend from claim 3, they have been included. Since claim 5 has the novel features and claims 17,21,25,31,38 depend from claim 5, they have been included.

PRIOR ART

The prior art made of record but not relied upon is considered pertinent to applicant's disclosure and consists of 1 patent.

Valve Features:

Hughey (U.S. Patent Number 4,187,878) is cited to show similar valve features as claimed by Applicant's invention.

Brenes (U.S. Patent Number 6,293,306) is cited to show similar valve features as claimed by Applicant's invention.

Karlicek (U.S. Patent Number 5,765,592) is cited to show similar airfoil features as claimed by Applicant's invention.

Bowman et al. (U.S. Patent Number 3,532,321) is cited to show similar airfoil features as claimed by Applicant's invention.

De Roo (U.S. Patent Number 2,837,991) is cited to show similar airfoil features as claimed by Applicant's invention.

Suzuki (U.S. Patent Number 6,131,882) is cited to show similar airfoil features as claimed by Applicant's invention.

Control System for Pump Operation:

Lee et al. (U.S. Patent Number 6,045,332) is cited to show similar control system features as claimed by Applicant's invention.

Binstock et al. (U.S. Patent Number 4,455,836) is cited to show similar control system features as claimed by Applicant's invention.

Binstock et al. (U.S. Patent Number 4,455,836) is cited to show similar control system features as claimed by Applicant's invention.

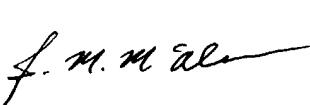
Binstock et al. (U.S. Patent Number 4,448,026) is cited to show similar control system features as claimed by Applicant's invention.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M McAleenan whose telephone number is 703-308-2827. The examiner can normally be reached on M-F 8:30-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on 703-308-1044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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Patent Examiner
703-308-2827


EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

10/21/04

Application/Control Number: 10/650,885

Art Unit: 3745

Page 8